



U.S. Department of Health and Human Services



Agency for Healthcare Research and Quality
Advancing Excellence in Health Care • www.ahrq.gov

The Healthcare Cost and Utilization Project (HCUP)

Overview of the HCUP Databases

Agency for Healthcare Research and Quality
Webinar ♦ September 10, 2014



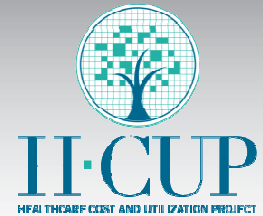
Webinar Overview



- **Project Overview**
- **HCUP Partners**
- **The Making of HCUP Data**
- **HCUP State Databases**
- **HCUP Nationwide Databases**
- **How to Obtain HCUP Data & Access HCUP Resources**



Research Using HCUP Data



Costs of care	Septicemia was the most expensive reason for hospitalization in 2012—totaling over \$20 billion in aggregate hospital costs (NIS)
Access to care	Americans in low-income areas visit EDs at rates 90 percent higher compared to those in the highest income areas (NEDS)
Quality of care	From 2004 to 2009, the overall inpatient mortality rate for hospital admissions with heart attack decreased significantly overall and for both genders and all expected payment sources (NIS)
Readmissions	For CHF, schizophrenia, and renal failure, at least 1 in 5 patients were readmitted within 30 days (SID with readmissions link)
Patient Safety	In 2009, postoperative sepsis occurred in 15 of 1,000 elective-surgery admissions of length 4 or more days, age 18 and over United States (NIS and PSI)
Geographic variation	ED visits were higher in counties with fewer primary care MDs per capita (SEDD)

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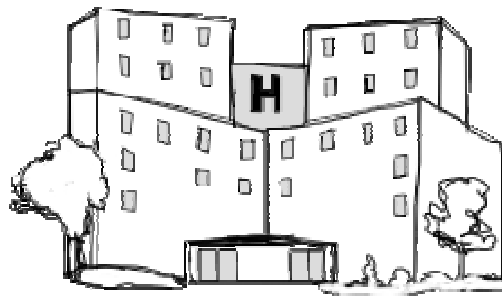
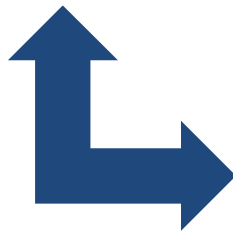
The HCUP Partnership



State



Federal



Industry

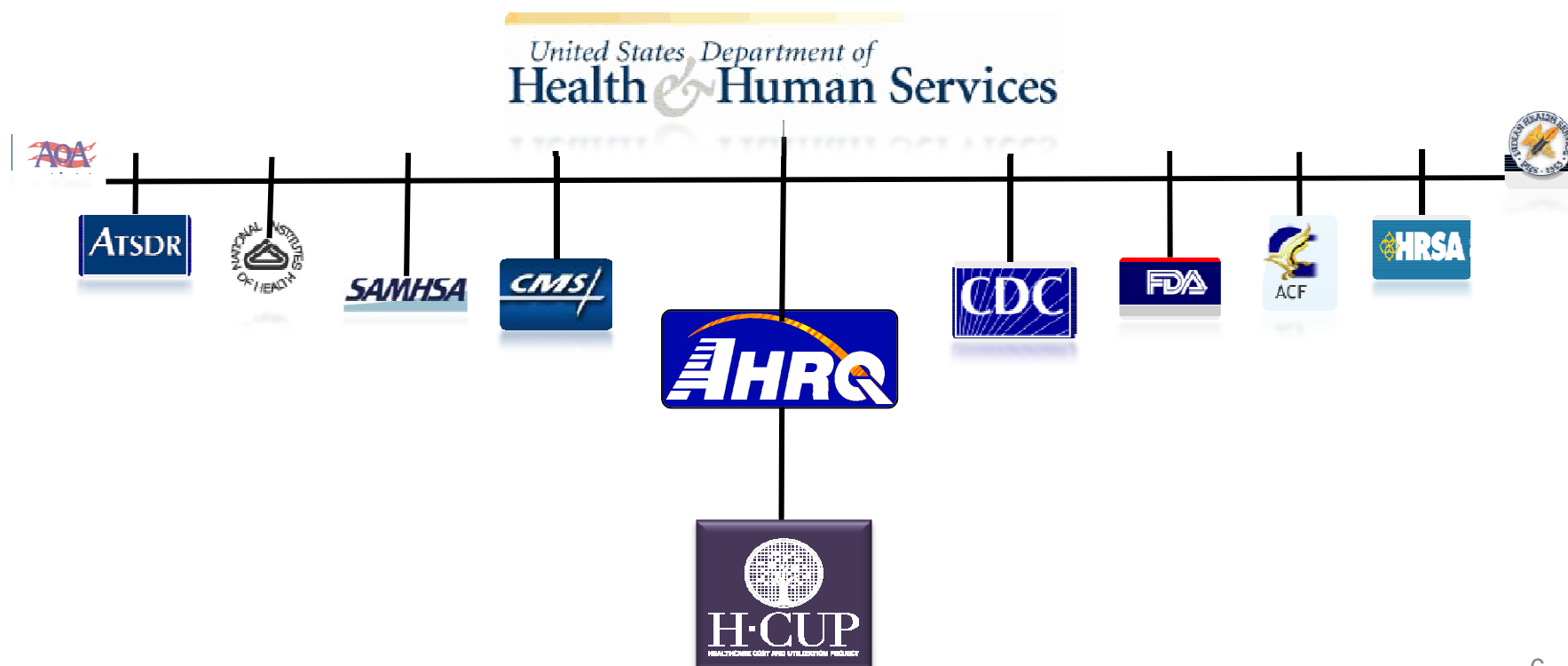




What is the Agency for Healthcare Research and Quality (AHRQ)?



The Agency for Healthcare Research and Quality (AHRQ) is a federal agency under the Department of Health and Human Services.





Current HCUP State Partners



Alaska State Hospital and Nursing Home Association

Arizona Department of Health Services

Arkansas Department of Health

California Office of Statewide Health Planning & Development

Colorado Hospital Association

Connecticut Hospital Association

Florida Agency for Health Care Administration

Georgia Hospital Association

Hawaii Health Information Corporation

Illinois Department of Public Health

Indiana Hospital Association

Iowa Hospital Association



Current HCUP State Partners



Kansas Hospital Association

Kentucky Cabinet for Health and Family Services

Louisiana Department of Health and Hospitals

Maine Health Data Organization

Maryland Health Services Cost Review Commission

Massachusetts Center for Health Information and Analysis

Michigan Health & Hospital Association

Minnesota Hospital Association

Mississippi Department of Health

Missouri Hospital Industry Data Institute

Montana MHA – An Association of Montana Health Care Providers

Nebraska Hospital Association



Current HCUP State Partners



Nevada Department of Health and Human Services
New Hampshire Department of Health & Human Services
New Jersey Department of Health
New Mexico Department of Health
New York State Department of Health
North Carolina Department of Health and Human Services
North Dakota Data Provided by Minnesota Hospital Association
Ohio Hospital Association
Oklahoma State Department of Health
Oregon Association of Hospitals and Health Systems
Oregon Health Authority
Pennsylvania Health Care Cost Containment Council
Rhode Island Department of Health
South Carolina State Budget & Control Board



Current HCUP State Partners



South Dakota Association of Health Care Organizations

Tennessee Hospital Association

Texas Department of State Health Services

Utah Department of Health

Vermont Association of Hospitals and Health Systems

Virginia Health Information

Washington State Department of Health

West Virginia Health Care Authority

Wisconsin Department of Health Services

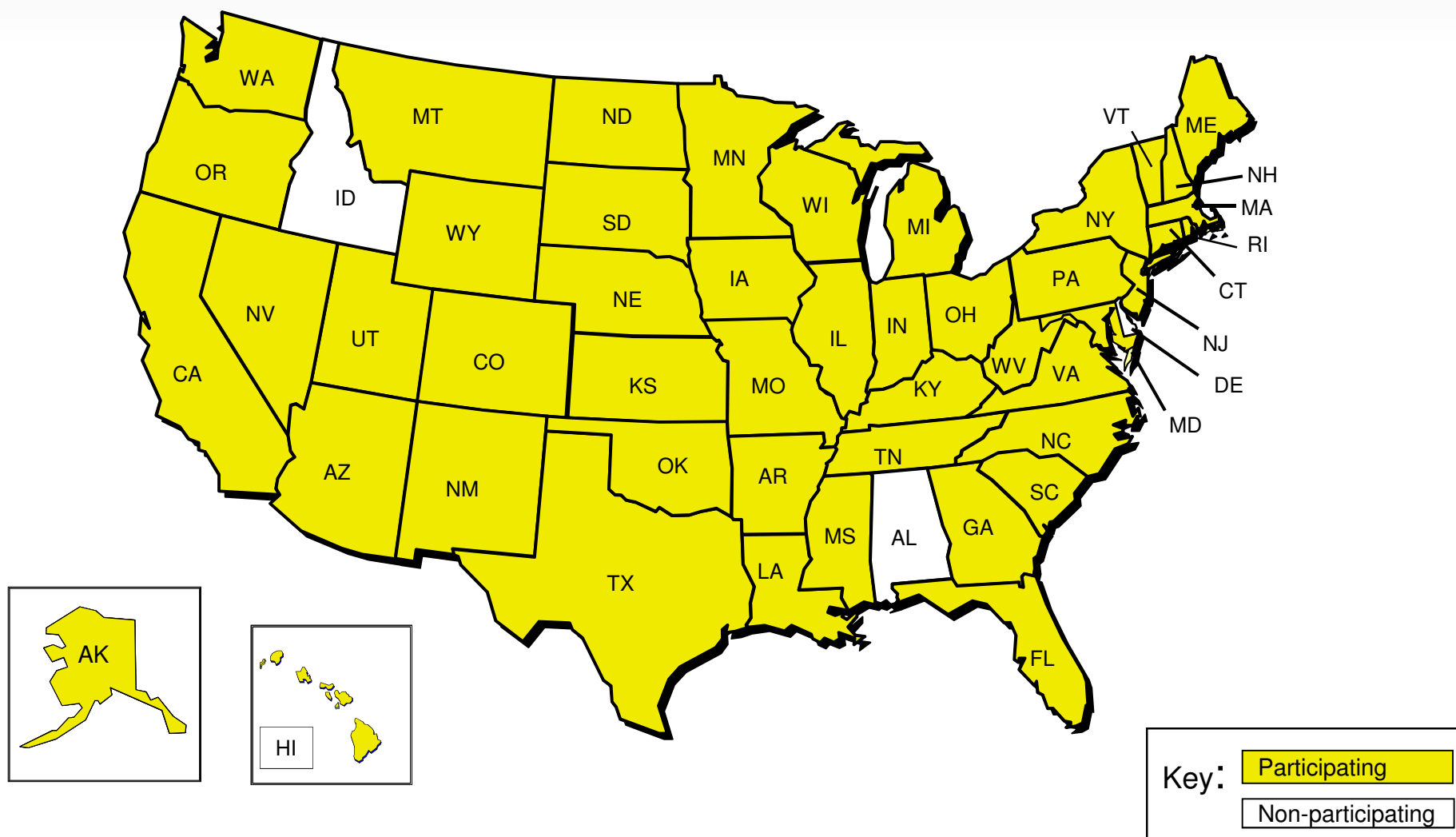
Wyoming Hospital Association



HCUP Partners Providing 2012 Inpatient Data



II-CUP
HOSPITAL INPATIENT AND OUTPATIENT PROJECT

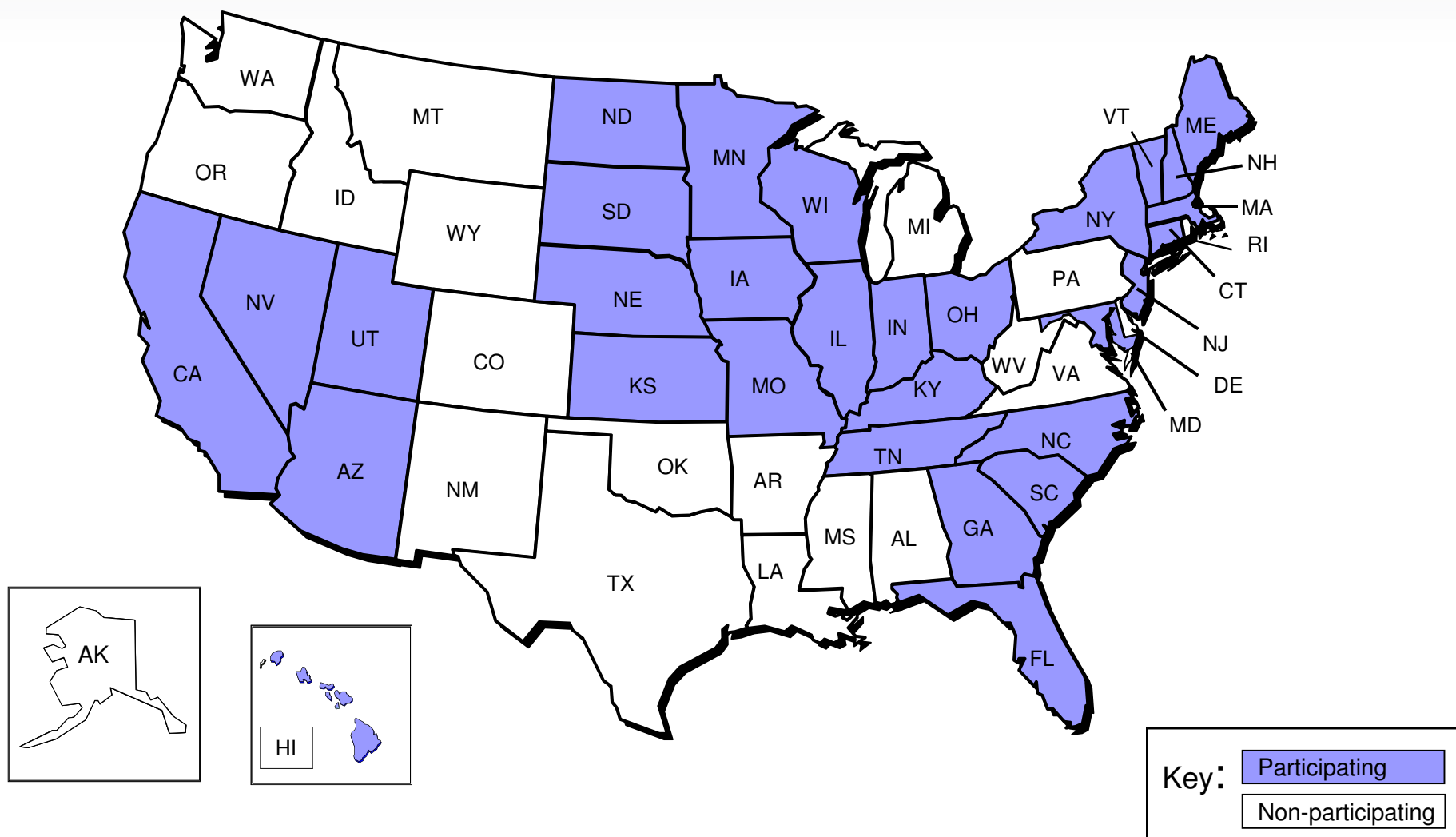




HCUP Partners Providing 2012 Emergency Department Data

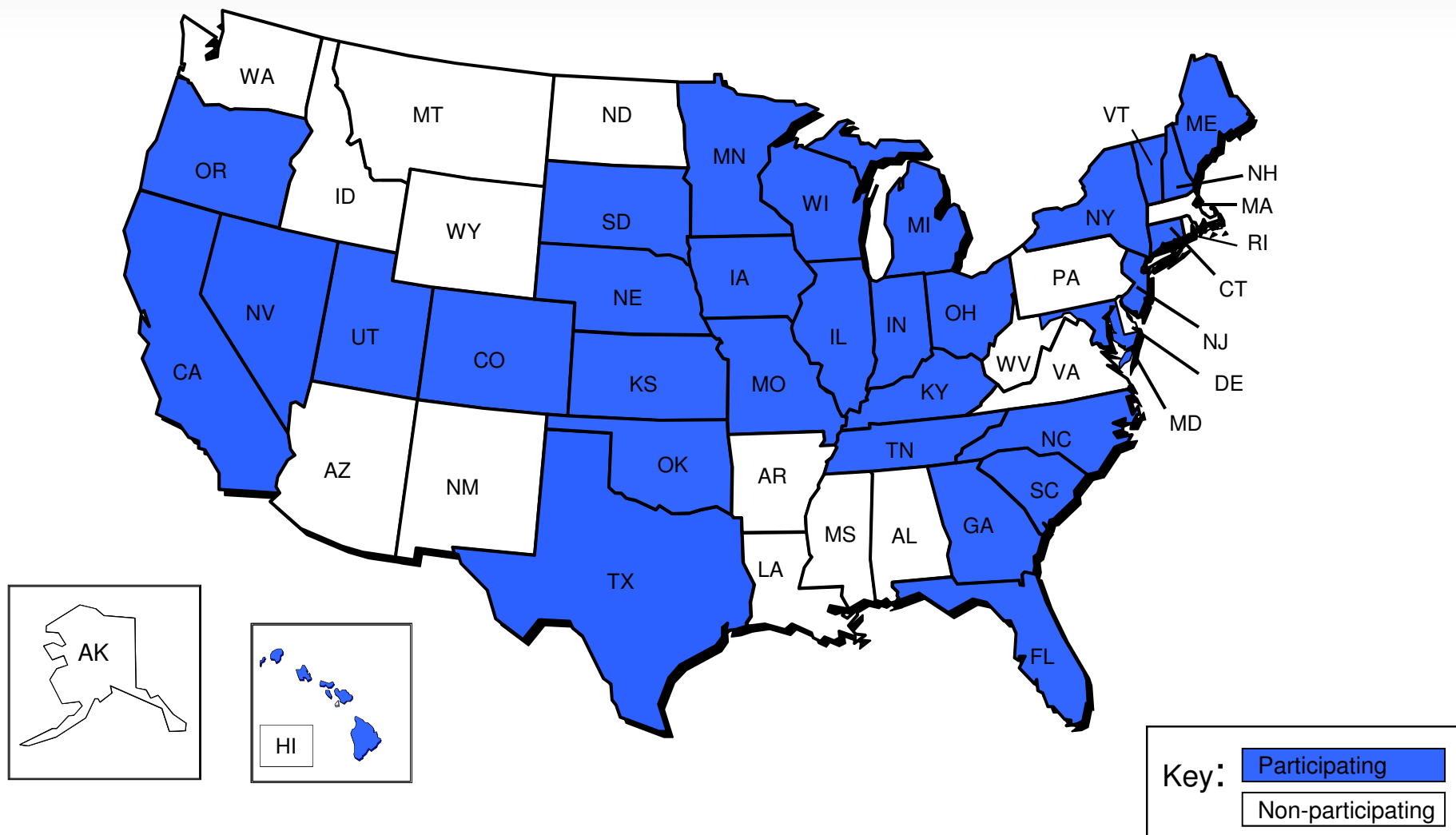


HCUP
HOSPITAL INPATIENT AND OUTPATIENT PROJECT



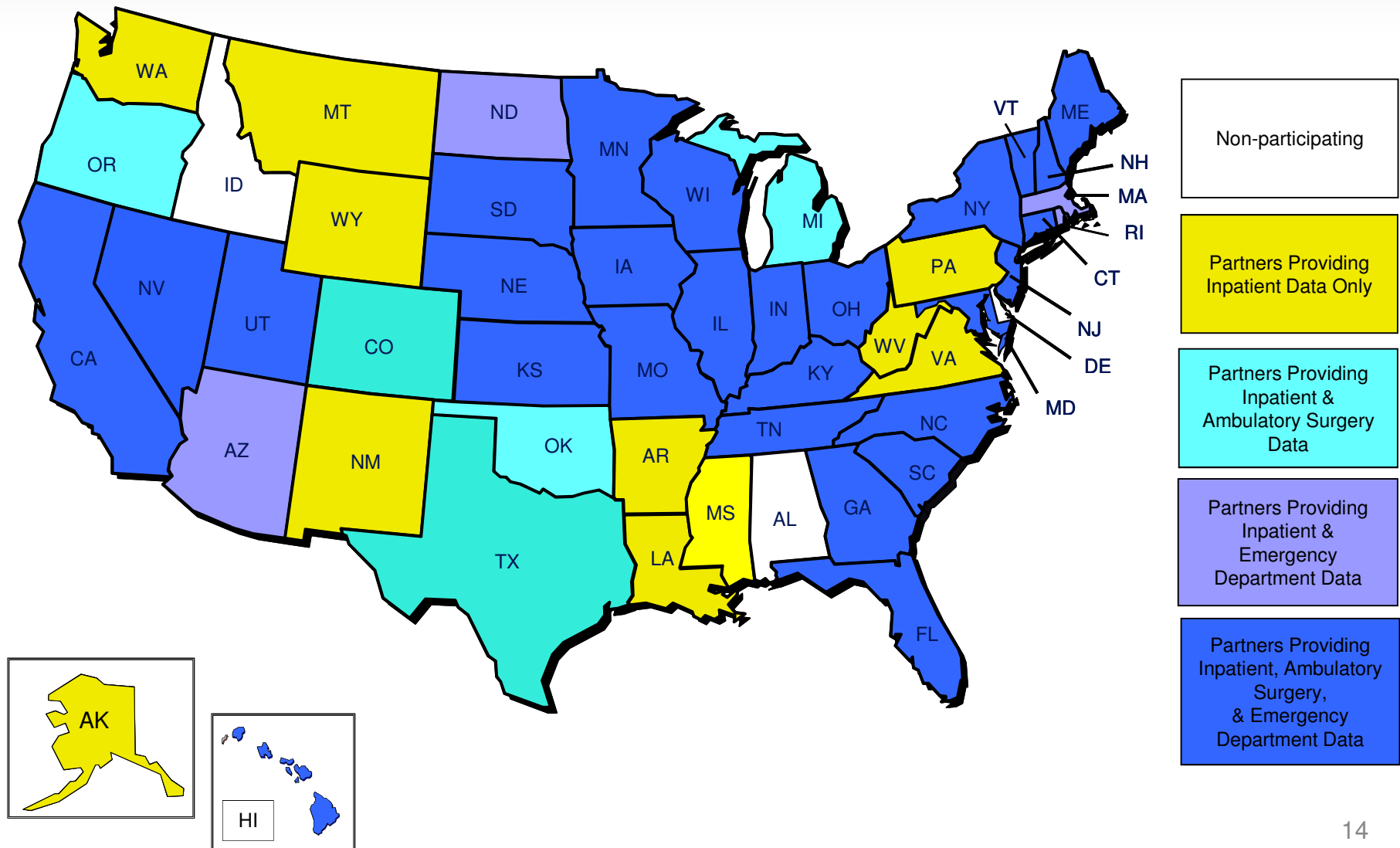


HCUP Partners Providing 2012 Ambulatory Surgery and Services Data





Partnership: HCUP Database Participation By State





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The Foundation of HCUP Data is Hospital Billing Data



UB-04
CMS 1500

Demographic
Data

Diagnoses
Procedures
Charges

1500
HEALTH INSURANCE CLAIM FORM
APPROVED BY NATIONAL UNIFORM CLAIM COMMITTEE 09/08

1. MEDICARE MEDICAID TRICARE CHAMPVA GROUP HEALTH PLAN (Select one)
2. PATIENT'S NAME (Last Name, First Name, Middle Initial)
3. PATIENT'S ADDRESS (No. Street)
4. CITY
5. STATE
6. ZIP CODE
7. TELEPHONE (Include Area Code)
8. PATIENT'S BIRTH DATE
9. PATIENT'S RELATIONSHIP TO YOU
10. PATIENT'S STATUS
11. PATIENT'S CONDITION
12. PATIENT'S POLICY OR GROUP NUMBER
13. PATIENT'S DATE OF BIRTH
14. PATIENT'S SEX
15. EMPLOYER'S NAME OR SCHOOL NAME
16. INSURANCE PLAN NAME OR PROGRAM NAME
17. PATIENT'S SIGNATURE
18. DATE OF SIGNATURE
19. NAME OF REFERRING PROVIDER OR OTHER SOURCE
20. PROVIDER'S SIGNATURE
21. PROVIDER'S DATE OF SIGNATURE
22. DIAGNOSIS OR NATURE OF ILLNESS OR INJURY (Please use ICD-9-CM 4th Edition)
23. DATE OF SERVICE
24. PROCEDURE, SERVICE, OR SUPPLY
25. DATE OF SERVICE
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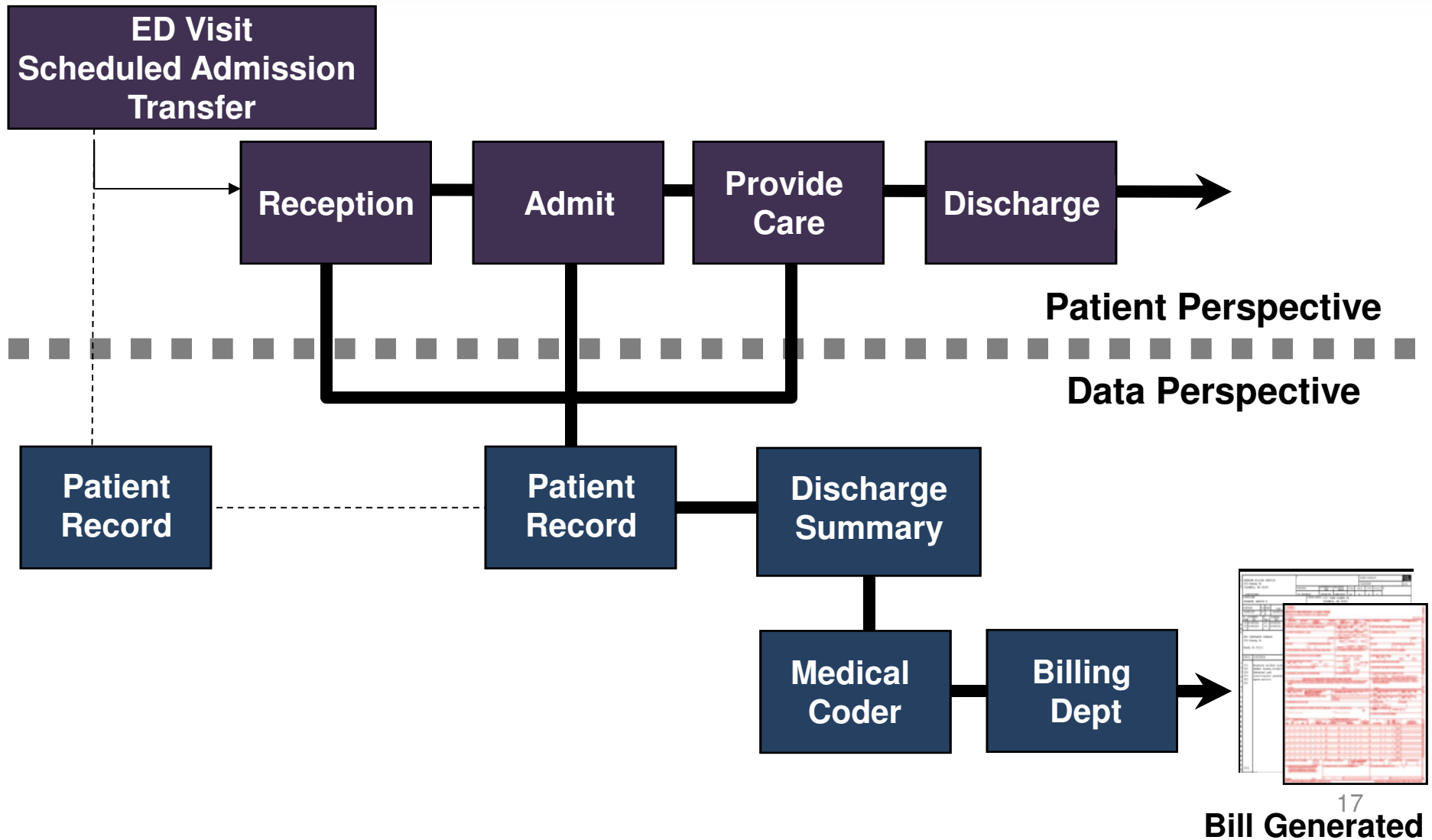
Sample
CMS-1500

UB-04
CMS 1500

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4. PATIENT RELATIONSHIP TO YOU
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From Patient Hospital Visit to HCUP Record

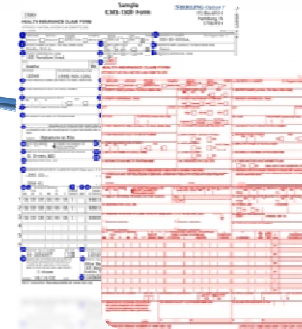




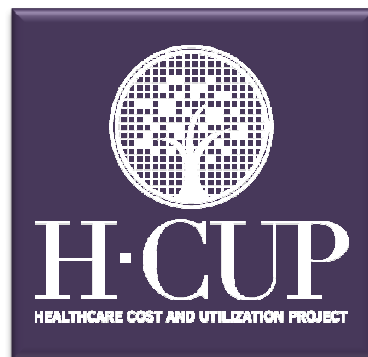
The Making of HCUP Data



Patient enters hospital



Billing record created



AHRQ standardizes data to create uniform HCUP databases

744	98	749	2	79	257	5	290
745	25	614	4	84	541	4	549
746	688	195	1	78	669	4	523
747	41	776	6	46	711	8	670
748	81	533	6	98	83	8	40
749	51	418	1	69	496	1	612
750	16	574	2	77	571	1	995
751	2	320	4	44	630	2	950
752	69	521	4	18	217	6	721
753	38	867	4	14	416	4	71
754	50	418	0	59	216	4	799
755	22	806	3	46	573	3	994
756	94	740	6	55	247	1	218
757	36	652	8	8	780	3	550
758	62	386	1	94	838	3	612
759	17	766	6	92	799	6	612
760	54	735	3	29	550	6	503
761	5	263	4	78	125	8	997
762	48	100	3	94	484	8	206
763	23	910	6	15	556	9	327
764	11	251	4	17	175	6	192
765	30	576	1	9	561	6	39

States store data in varying formats



Hospital sends billing data and any additional data elements to data organizations



The HCUP Data Process



- State data is mapped to a standardized HCUP format which allows for consistent data elements and values across States for comparison
- Additional data elements are added:
 - ▶ Value-added variables – injury indicators, chronic condition indicators, procedure class
 - ▶ Hospital characteristics – teaching status, ownership/control, bed size
 - ▶ Diagnostic related groups and severity measures –
 - AHRQ's Clinical Classification Software (CCS)
 - 3M's All Patient Refined DRGs (APR-DRGs)
- Quality checks are performed

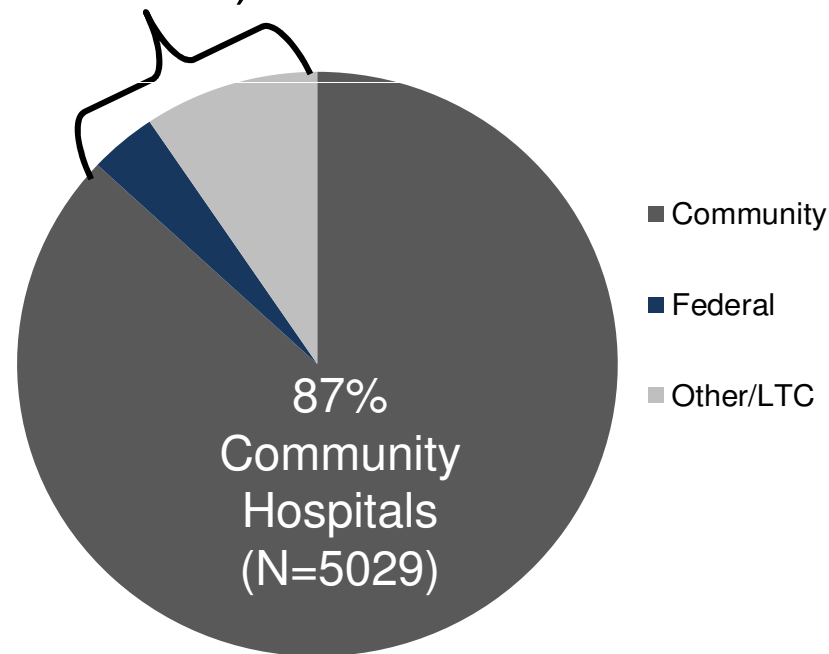


Hospitals in the U.S.



- 87% of hospitals in the U.S. are community hospitals

13% Non-community hospitals (Federal (DOD/VA/IHS), psychiatric, non-federal long term care, etc.)





What Are Community Hospitals?



American Hospital Association Definition:

Non-Federal, short-term, general, and other specialty hospitals, excluding hospital units of other institutions (e.g., prisons)

Included	Excluded
Multi-specialty general hospitals	Long-term care
OB-GYN	Psychiatric
ENT	Alcoholism/Chemical dependency
Orthopedic	Rehabilitation
Pediatric	DoD / VA / IHS
Public	
Academic medical centers	



What are Community Hospitals?



- HCUP generally does not receive data from non-community hospitals.
- However, if a patient is treated in a community hospital, their information is included.

Most Frequent Principal Diagnosis	Number of Discharges (thousands)
1. Newborns	3,817
2. Pneumonia	1,113
3. Septicemia	1,093
4. Congestive heart failure	970
5. Osteoarthritis	964
6. Mood disorders	895
7. Cardiac dysrhythmias	795

Source: Nationwide Inpatient Sample, 2011



HCUP Has 6 Types of Databases



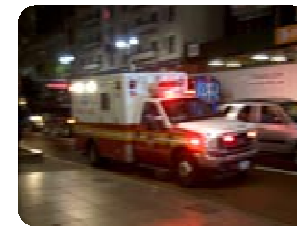
- Three state-level databases



State
Inpatient
Databases
(SID)



State
Ambulatory
Surgery &
Services
Databases
(SASD)



State
Emergency
Department
Databases
(SEDD)

- Three nationwide databases



National
(Nationwide)
Inpatient
Sample
(NIS)



Nationwide
Emergency
Department
Sample
(NEDS)



Kids'
Inpatient
Database
(KID)



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HCUP State Databases



State Inpatient Databases (SID)

All inpatient hospital discharge data (including those admissions that started in the ED) from participating HCUP States

State Ambulatory Surgery & Services Databases (SASD)

Ambulatory surgery data (hospital based and some freestanding) and other outpatient services from participating HCUP States

State Emergency Department Databases (SEDD)

Emergency department data (treat and release) from participating HCUP States



What Data Elements are included in the HCUP databases?



Data Elements:

- Patient demographics (age, sex)
- Diagnoses & procedures
- Expected payer
- Length of stay
- Patient disposition
- Admission source & type
- Admission month
- Weekend admission





Some Data Elements Vary by State

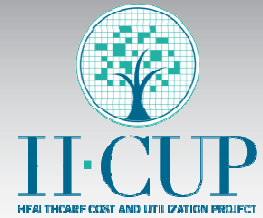


- Race/Ethnicity
- Patient county
- Patient ZIP Code
- Severity of illness
- Birthweight
- Procedure date (days from admission)
- Health plan details
- Additional expected payers
- Detailed charges
- Patient identifiers encrypted
- Physician identifiers encrypted
- Physician specialty
- Hospital identifier unencrypted





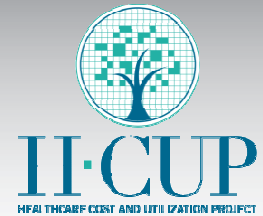
Example: Payer Detail Varies by State



PAY1_X		PAY1 (Standardized)	
Value	Description	Value	Description
010	Medicare	1	Medicare
011	Medicare (HMO)		
012	Medicare (Managed care - Other)		
013	Medicare (fee for service)		
020	Medi-Cal	2	Medi-Cal
021	Medi-Cal (HMO)		
022	Medi-Cal (Managed care - Other)		
023	Medi-Cal (fee for service)		
030	Private Coverage	3	Private insurance
031	Private Coverage (HMO)		
032	Private Coverage (Managed care - Other)		
033	Private Coverage (fee for service)		
08n, where n=0-3	Self-pay	4	Self-pay
--		5	No charge



Example: Race Detail Varies by State



RACE_X		RACE (Standardized)	
Value	Description	Value	Description
1	White	1	White
2	Black	2	Black
3	Hispanic	3	Hispanic
4	Hawaiian	4	Asian or Pacific Islander
5	Chinese		
6	Filipino		
7	Japanese		
8	Other Asian		
9	Other Pacific Islander		
10	Native American	5	Native American
11	Mixed or Other	6	Other



Partner State Files vs. HCUP State Files



- HCUP State Files vs. Data Files received directly from the State

HCUP State Files

Subset of data elements

Value-added data elements

Uniformly coded across the states

Standard data quality checks

Lag time

Partner State Files

All data elements

May not have same value-added elements

Not uniformly coded across states

Variability in quality checks by state

More timely



States Releasing Databases through HCUP Central Distributor



HCUP
HEALTHCARE COST AND UTILIZATION PROJECT

- Arizona
- Arkansas
- California
- Colorado
- Florida
- Hawaii
- Iowa
- Kentucky
- Maine
- Maryland
- Massachusetts
- Michigan
- Mississippi
- Nebraska
- Nevada
- New Jersey
- New Mexico
- New York
- North Carolina
- Oregon
- Rhode Island
- South Carolina
- South Dakota
- Utah
- Vermont
- Washington
- West Virginia
- Wisconsin

Remember:

**Not all states
participate in all
years and for all
databases**



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HCUP Nationwide Databases



National (Nationwide)
Inpatient Sample
(NIS)



Inpatient discharge data for a **sample of discharges from all hospitals** in SID

Kids' Inpatient
Database
(KID)

Pediatric inpatient hospital discharge data from a **sample of pediatric discharges** in SID

Nationwide Emergency
Department Sample
(NEDS)

Emergency department data (treat and release & admitted) from a sample of hospitals in SID and SEDD

- The 2012 National Inpatient Sample (NIS) is a *sample of discharges from all hospitals* in HCUP equal to approximately 20% of all discharges in U.S. community hospitals
- The previous NIS was comprised of *all discharges from a 20% sample of U.S. community hospitals* drawn from the HCUP State Inpatient Databases and included 100% of discharges from those hospitals



2012 NIS is a Stratified Sample of Discharges from the SID



State Inpatient Databases (SID)

2012 SID
~ 4,380 hospitals
~ 34.3M records

Strata

- U.S. Division
- Urban/Rural Location
- Teaching Status
- Ownership/Control
- Bed Size

Stratified Sample of Discharges

*State not included in the
stratum

Within strata sort by
hospital, DRG, and
admission month and
select 1 in 5 records



2012 National Inpatient Sample (NIS)

N = ~ 4,380 hospitals
~ 7.3M records



KID is a Stratified Sample of Discharges from the SID



2012 State Inpatient Databases (SID)

~ 4,380 hospitals
~ 34.3M records

Strata

- Uncomplicated Births
- Complicated Births
- Pediatric Non-Births

Stratified Sample of Discharges

*State not included in the stratum

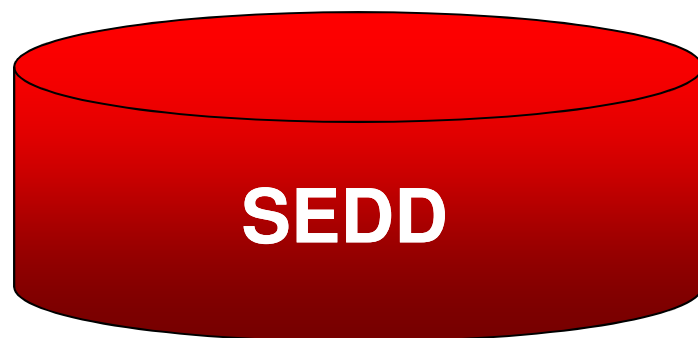
• 10% uncomplicated births

• 80% pediatric discharges

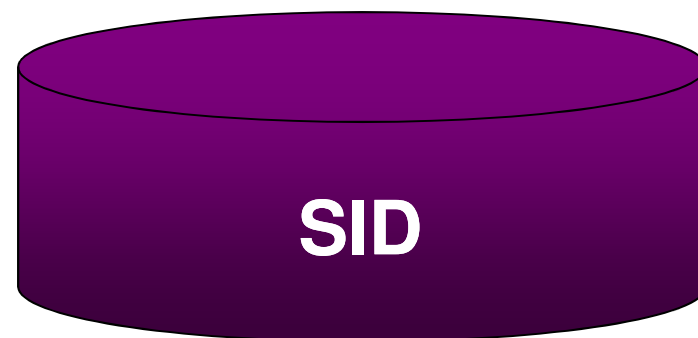


2012 Kids' Inpatient Database (KID)

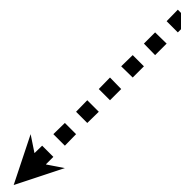
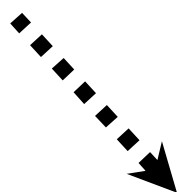
N = ~ 4K hospitals
~ 3M records



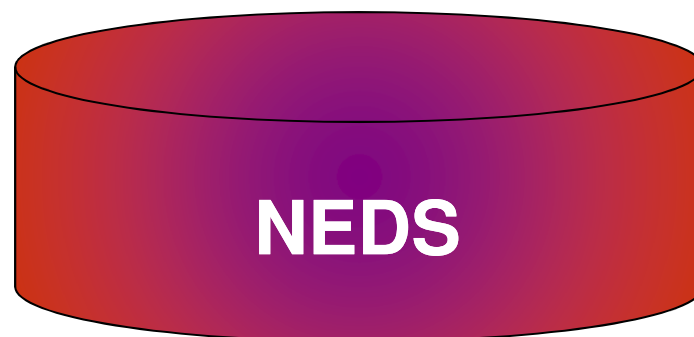
Treat-and-Release ED Visits



Admitted ED Visits



About 84% of ED visits are treat-and-release



About 16% of ED visits result in a hospital stay



NEDS is a Stratified Sample of Hospitals from the SEDD and SID



2011
State
Inpatient
Databases
(SID)
State
Emergency
Department
Databases
(SEDD)

Strata

- U.S. Region
- Urban/Rural Location
- Teaching Status
- Ownership/Control
- Trauma center

Stratified Sample
of Hospitals

*State not included as stratum



2011
Nationwide
Emergency
Department
Database
(NEDS)

N = ~ 1K hospitals
~ 29M records



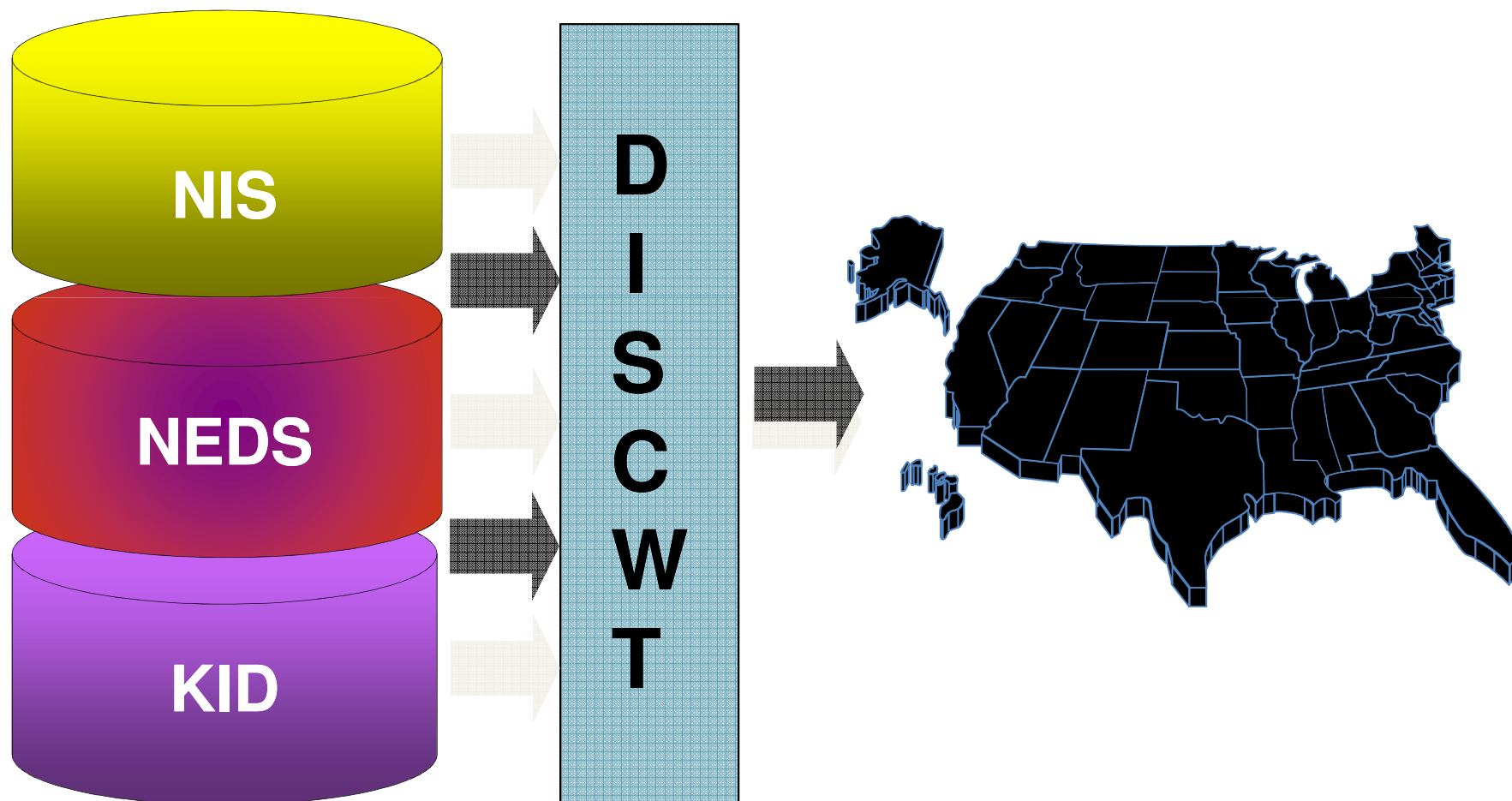
NEDS-Specific Variables



- Type of ED event: treated and released, admitted to the same hospital, transferred, died (**EDEVENT**)
- Disposition of patient from ED (**DISP_ED**)
- Died in the ED: died in the ED, died in the hospital, did not die (**DIED_VISIT**)
- Diagnosis reported on record indicates self harm (**INTENT_SELF_HARM**)
- Trauma center level I, II, or III (**HOSP_TRAUMA**)
- HCUP ED hospital identifier (**HOSP_ED**)

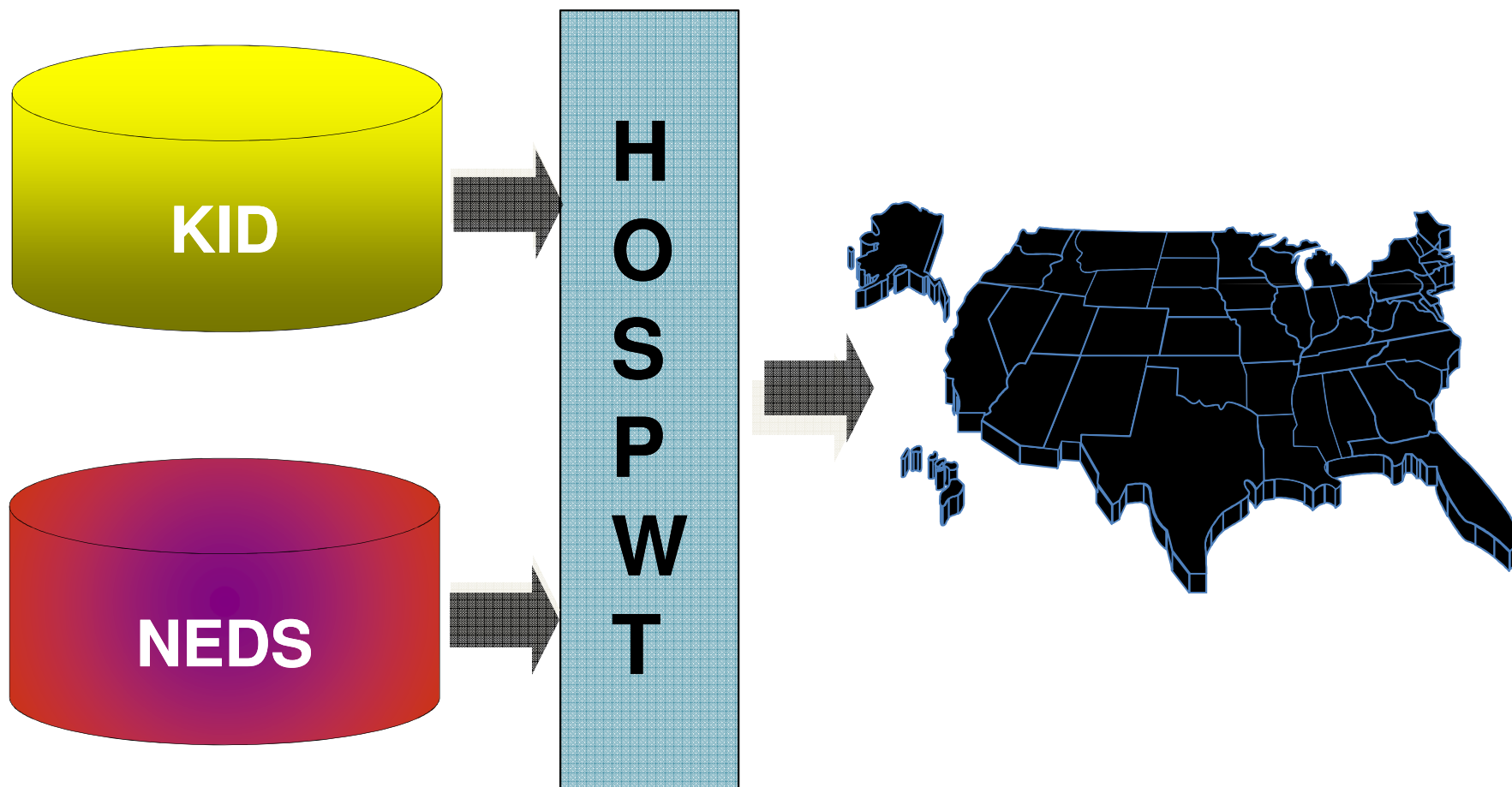


NIS, NEDS, KID: Must be Weighted to Produce National and Regional Estimates





KID and NEDS: Must be Weighted to Produce National and Regional Estimates





What Types of Care Are and Are Not Captured by HCUP?

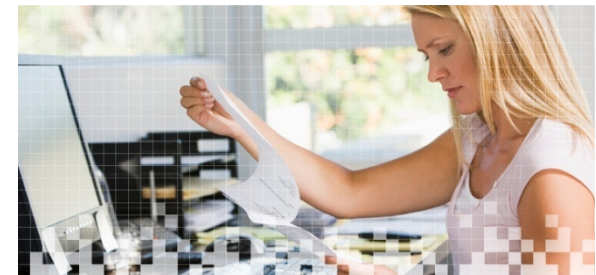


Included in HCUP

Inpatient Care	State Inpatient Databases (SID) National (Nationwide) Inpatient Sample (NIS) Kids' Inpatient Database (KID)
Emergency Department	State Emergency Department Databases (SEDD) Nationwide Emergency Department Sample (NEDS)
Ambulatory Surgery & Services	State Ambulatory Surgery & Services Databases (SASD)

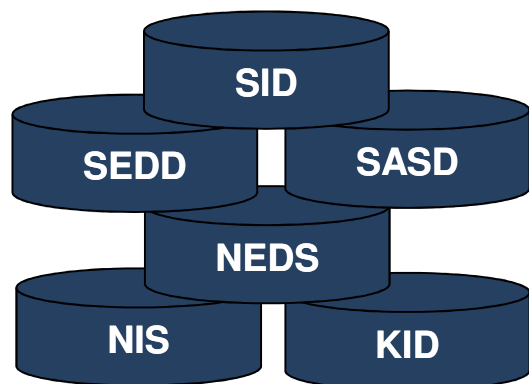
Not Included in HCUP

Physician office visits
Pharmacy
Labs/Radiology

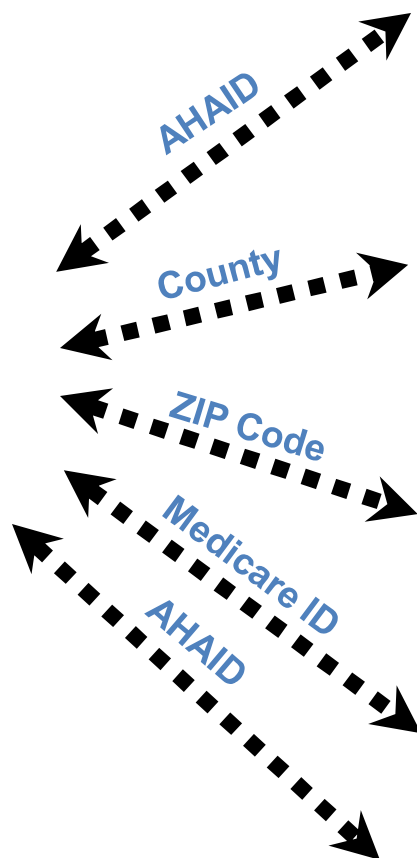




Some Limitations Can be Addressed by Linking to Other Databases



**HCUP
Databases**



American Hospital Association
(AHA) Annual Survey

Health Resources and Services
Administration's (HRSA) Area
Health Resource File (AHRF)

Zip Code Files from Census
or Vendor

Medicare Cost Reports

Trauma Information Exchange
Program (TIEP)



What is HCUP and What Is It Not?



HCUP is...

Discharge database for health care encounters

All payer, including the uninsured

Hospital, ambulatory surgery, emergency department data

All hospital discharges

Accessible multiple ways: raw data, regular reports, online

HCUP is NOT...

A survey

Specific to a single payer, e.g. Medicare

Office visits, pharmacy, laboratory, radiology

Only a sample

Just another database



Hospital Billing Data Have Benefits and Limitations



Benefits

Large number of visit records

Uniformity of coding

Routine, regular collection

Ease of access

All-payer

Available at local, state, regional and national level

Supplemental files available to facilitate research

Limitations

Differences in coding across hospitals

Limited clinical details

Lack revenue information

May not include all hospitals

May not show complete experience of care

No data on individuals outside of hospital system

- Six types of HCUP databases
- Databases are based on administrative hospital data: inpatient, ED, and ambulatory surgery and services
- Available for multiple years
 - ▶ Nationwide
 - NIS (1988-2012)
 - NEDS (2006-2011)
 - KID (1997, 2000, 2003, 2006, 2009, 2012)
 - ▶ State
 - SID (1990-2012)
 - SASD (1997-2012)
 - SEDD (1999-2012)
- Can look at breadth of health care issues
- Can be linked to external files



Today's Objectives



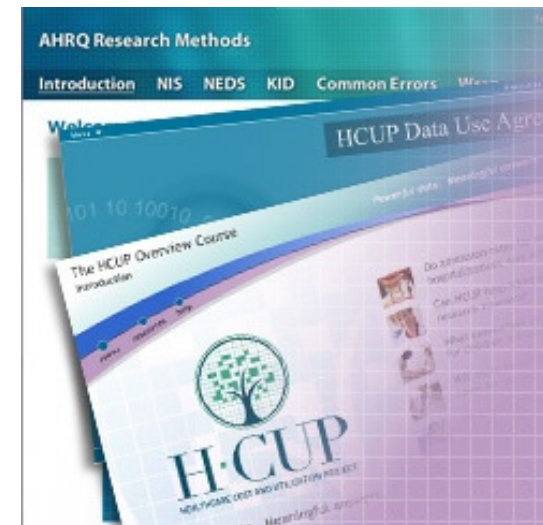
- **Project Overview**
- **HCUP Partners**
- **The Making of HCUP Data**
- **HCUP State Databases**
- **HCUP Nationwide Databases**
- **How to Obtain HCUP Data & Access HCUP Resources**



The HCUP Database Process



- Processed data sent to HCUP Partners
- State databases may become available to public through:
 - ▶ State Data Organization
 - OR*
 - ▶ HCUP Central Distributor





To Purchase HCUP Data Two Methods



Method 1
HCUP Central Distributor
www.hcup-us.ahrq.gov/tech_assist/centdist.jsp

Method 2
HCUP Partner States
www.hcup-us.ahrq.gov/partners.jsp



Purchase Data Through the HCUP Central Distributor



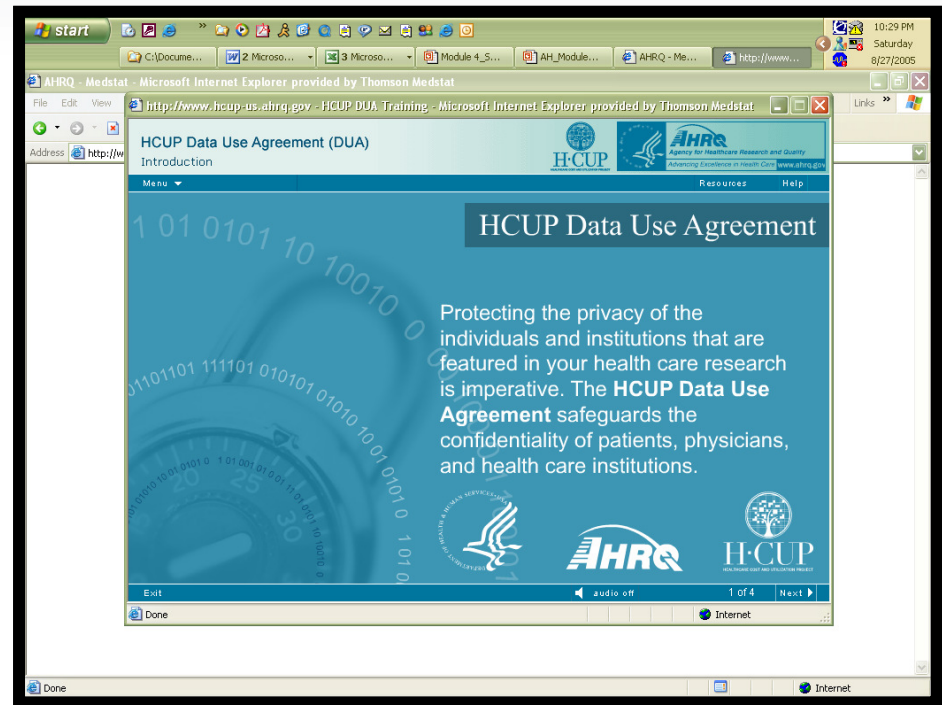
- **Step 1: Download and complete application kit:**
http://www.hcup-us.ahrq.gov/tech_assist/centdist.jsp
- **Step 2: Obtain more information (if needed):**
Phone: 866-556-HCUP (4287) toll free
E-mail: HCUPDistributor@ahrq.gov
- **Step 3: Take Data Use Agreement (DUA) on-line training and sign DUA**
- **Step 4: Send order form, signed DUA, and payment to HCUP Central Distributor**



Additional Requirement: Electronic Data Use Agreement (DUA) Course



- **Purpose of the Course:**
 - ▶ Emphasize the importance of **data protection**
 - ▶ Reduce the risk of **inadvertent violations**
 - ▶ Describe your **individual responsibility** when using HCUP data



Takes 15 minutes to Complete

<http://www.hcup-us.ahrq.gov/DUA/new2013/index.htm>



Pricing Information Per Data Year



Nationwide Databases (NIS, KID, NEDS)

- ▶ **NIS**: \$350 (2007-2012; student price \$50)
\$160-200 (earlier years; student price \$20)
- ▶ **KID**: \$350 (2009 and 2012; student price \$50)
\$200 (earlier years; student price \$20)
- ▶ **NEDS**: \$500 (student price \$75)



State Databases (SID, SASD, SEDD)





- ▶ Varies by state, database, year, and type of applicant
- ▶ \$35 - \$3,185





Software Requirements of Working with the Full HCUP Files

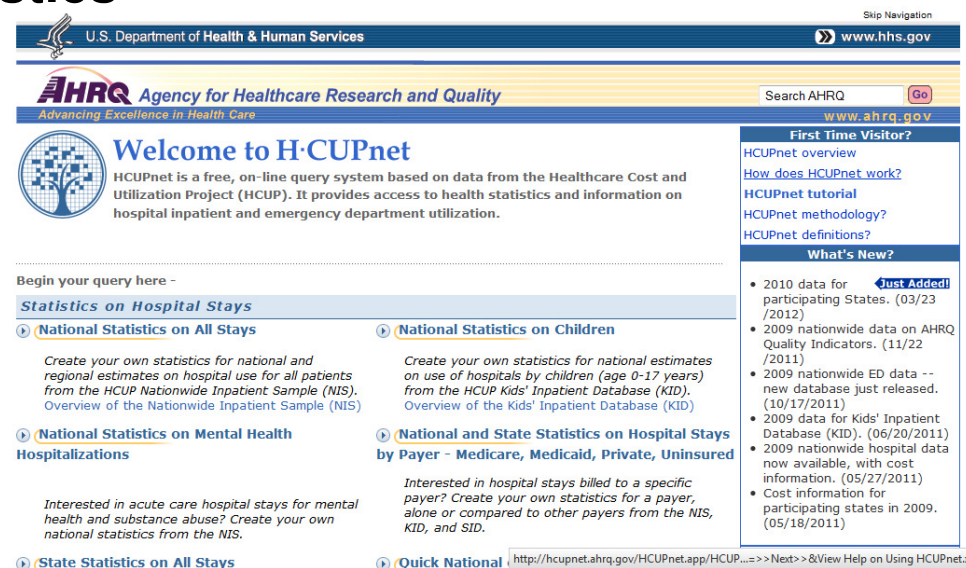


Software Package	Load Programs	Format Programs	Example Statistical Coding	HCUP Tools Programs
	X	X	X	X
	X		X	X
	X			X
			X	

**MS Excel and Access are NOT GOOD
Options!**



- **Free online query system**
- **Users generate tables of outcomes by diagnoses and procedures**
- **Data can be cross-classified by patient and hospital characteristics**



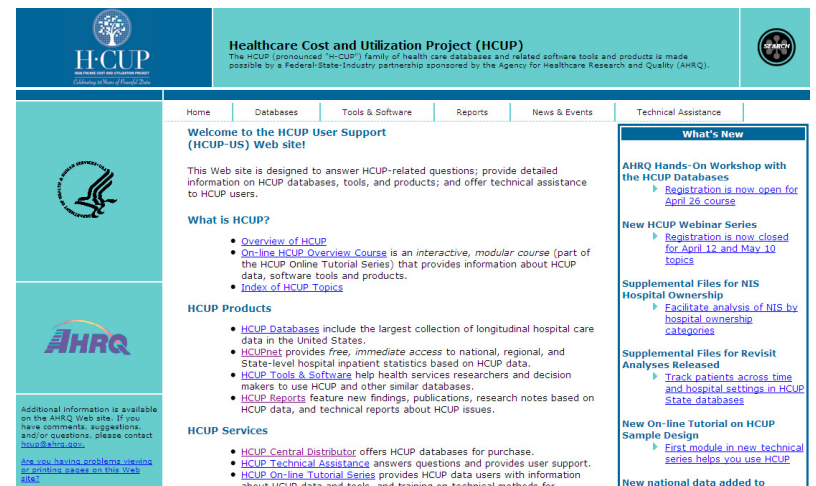
<http://hcupnet.ahrq.gov>



HCUP User Support Web Site



- Find detailed information on HCUP databases, tools, and products
- Access HCUPnet
- Find comprehensive list of HCUP-related publications, database reports, and fact books
- Access technical assistance



<http://www.hcup-us.ahrq.gov>



Interactive On-line HCUP Overview Course Available



- Provides information about HCUP data, software tools, and products
- Length 90 min

The HCUP Overview Course
Overview of HCUP Data

Powerful data. Meaningful answers.

menu resources help exit

The diagram shows a circular structure of HCUP databases. The top half is labeled 'Inpatient' and contains 'State Inpatient Databases (SID)' which includes 'Nationwide Inpatient Sample (NIS)', 'Kids' Inpatient Database (KID)', and 'Nationwide Emergency Department Sample (NEDS)'. The bottom half is labeled 'Outpatient' and contains 'State Ambulatory Surgery Databases (SASD)' and 'State Emergency Department Databases (SEDD)'. A 'Map' icon is in the bottom left.

The State Inpatient Databases (SID) are a set of state-level hospital databases capturing inpatient care in participating states. Researchers and policymakers can use the SID to study many state-level issues surrounding health care utilization, access, charges and costs, quality, and outcomes.

Roll over each of the six databases for a brief description.

Next Back

The HCUP Overview Course
Introduction

Powerful data. Meaningful answers.

menu resources help exit

H-CUP
HEALTHCARE COST AND UTILIZATION PROJECT

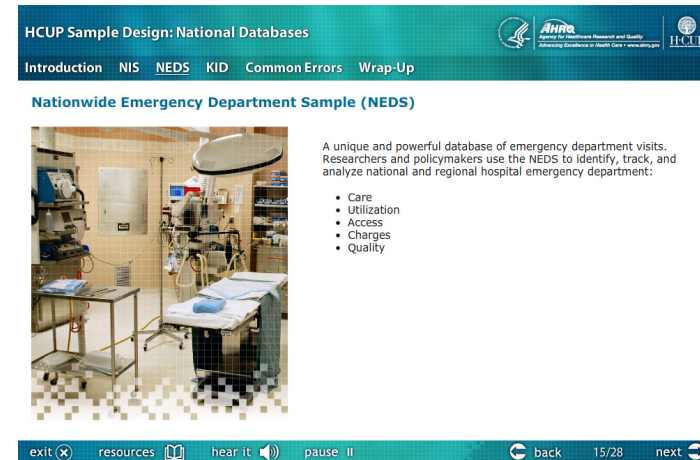
Powerful data. Meaningful answers.

- Do admission rates for preventable hospitalizations vary across the U.S.?
- What percentage of hospitalizations for children are uninsured in my state?
- What are the most common conditions treated in the Emergency Department?
- Will there be enough cases for my analysis?
- What are the latest trends in ambulatory surgery for knee injuries?
- What tools are available to help me in my research?

Next Back

<http://www.hcup-us.ahrq.gov/overviewcourse.jsp>

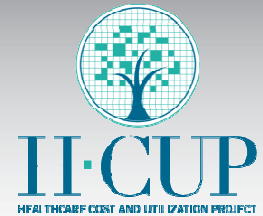
- Tutorial explains the sampling strategy of the three nationwide databases – the NIS, KID, and NEDS
- Length 30 min



http://www.hcup-us.ahrq.gov/tech_assist/tutorials.jsp



Load and Check HCUP Data



- Provides instructions on how to unzip HCUP data, save it on your computer, and load data into a statistical software package
- Length 20 min

Load and Check HCUP Data

Introduction Load Check Wrap-Up



Healthcare Cost and Utilization Project

Load and Check

exit resources hear it play back 1/16 next

Load and Check HCUP Data

Introduction Load Check Wrap-Up

Running Check Programs

My NIS Data Means and Frequencies:

AGE (Age)	Frequency	Percent of Total
0		
1		

LOS (Length of Stay)

Frequency	Percent of Total
0 days	
1 day	

Payr (Expected Primary Payer)

Frequency	Percent of Total
1: Medicare	
2: Medicaid	

HCUP-US Summary Statistics Means and Frequencies:

AGE (Age)	Frequency	Percent of Total
0		
1		

LOS (Length of Stay)

Frequency	Percent of Total
0 days	
1 day	

Payr (Expected Primary Payer)

Frequency	Percent of Total
1: Medicare	
2: Medicaid	

Create tables of means and of frequency distributions from the data on your computer.

Compare those statistics to the summary statistics available on HCUP-US.

exit resources hear it pause back 13/16 next

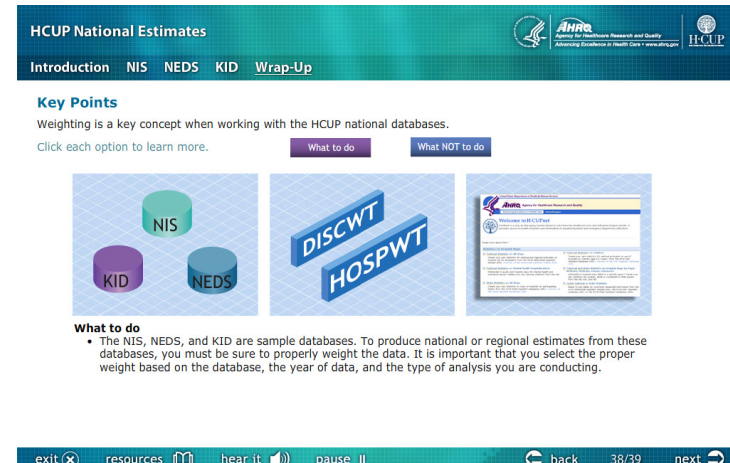
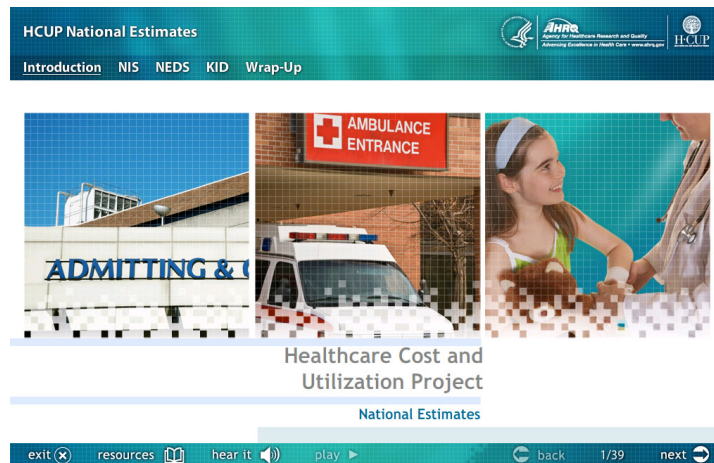
http://www.hcup-us.ahrq.gov/tech_assist/tutorials.jsp



Producing National HCUP Estimates



- Explains how to produce national estimates from the three nationwide databases (NIS, NEDS, KID)
- Length 45 min



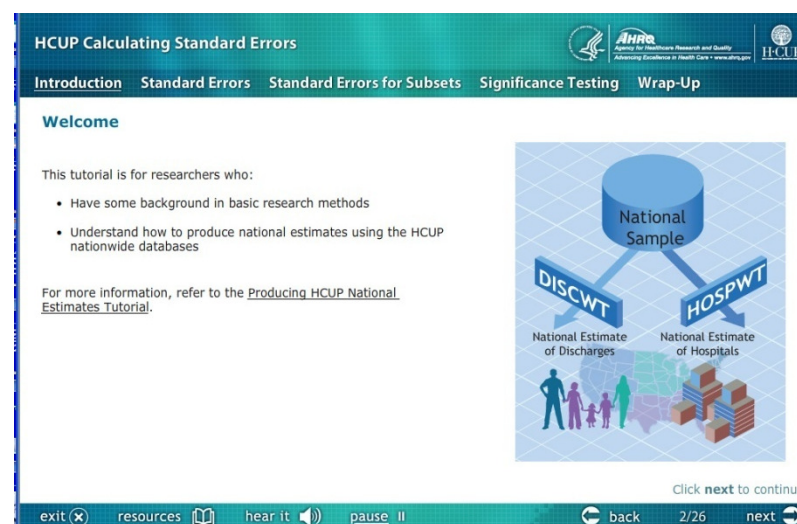
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Calculating Standard Errors

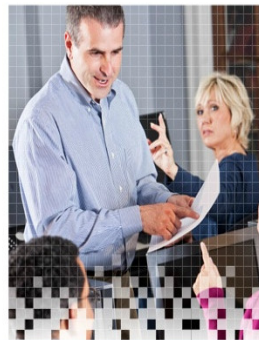


- Explains how to accurately determine the precision of the estimates produced from the HCUP nationwide databases
- Length 30 min



http://www.hcup-us.ahrq.gov/tech_assist/tutorials.jsp

- Describe problems that may arise when using multiple years of HCUP data and provides solutions for addressing these issues
- Length 30 min

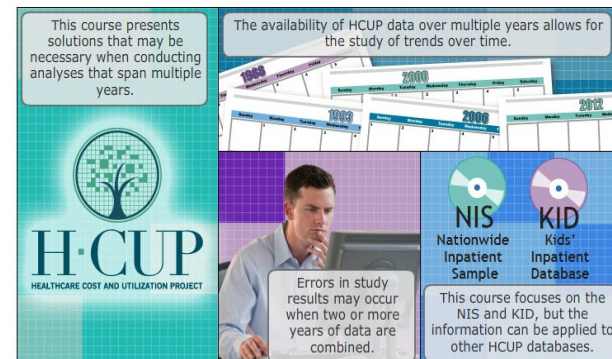


Healthcare Cost and
Utilization Project

Trend Analysis



Introduction



This course presents solutions that may be necessary when conducting analyses that span multiple years.

The availability of HCUP data over multiple years allows for the study of trends over time.

H-CUP
HEALTHCARE COST AND UTILIZATION PROJECT

NIS
Nationwide Inpatient Sample

KID
Kids' Inpatient Database

Errors in study results may occur when two or more years of data are combined.

This course focuses on the NIS and KID, but the information can be applied to other HCUP databases.

[http://www.hcup-us.ahrq.gov/tech assist/tutorials.jsp](http://www.hcup-us.ahrq.gov/tech_assist/tutorials.jsp)



Using HCUP Technical Assistance



Active Technical Assistance

- Responds to inquiries about HCUP data, products, and tools
- Collects user feedback and suggestions for improvement

E-mail: hcup@ahrq.gov





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 - ▶ Upcoming Events
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- New Reports

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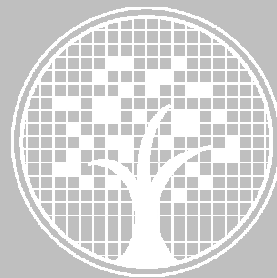
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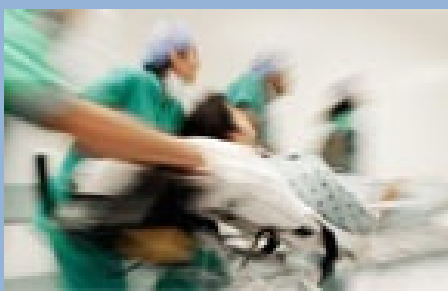
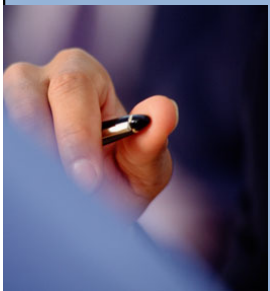
<http://www.ahrq.gov/data/hcup/hcuplist.htm>

HealthCare Cost and Utilization Project (HCUP)



H·CUP

HEALTHCARE COST AND UTILIZATION PROJECT





Questions/Comments?



**Time for Questions
and/or Comments.**

